PDM Modules / AP203 E2

June 2001

Harmonized modules

AP203 IS

Harmonize

AP214 DIS

PDM Schema

Ship Common Model

PDM Modules

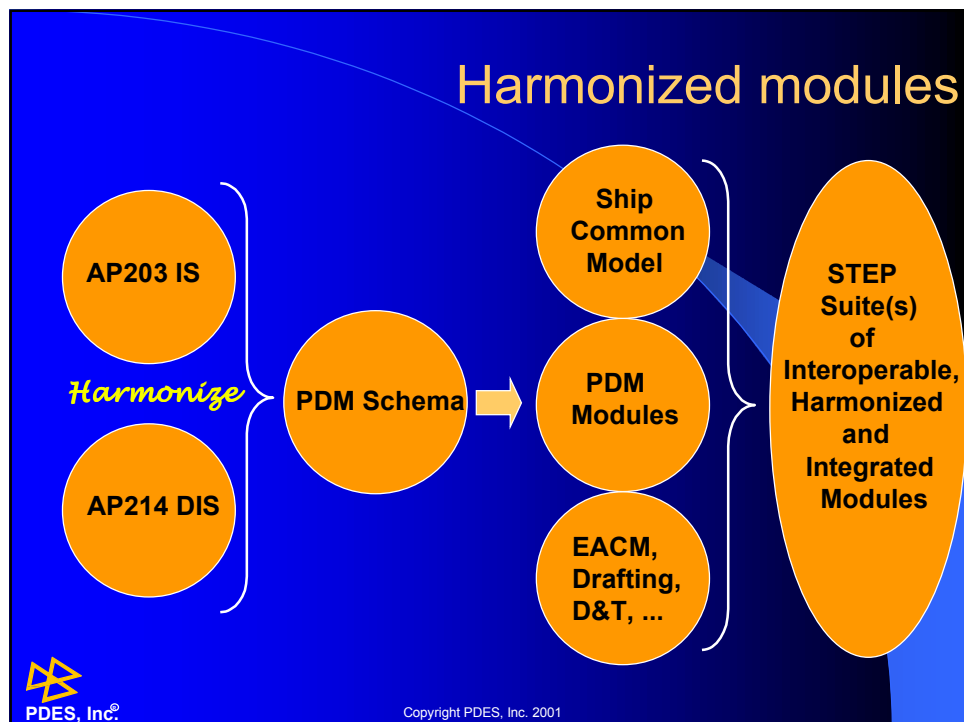EACM, Drafting, D&T, ...

STEP Suite(s) of Interoperable, Harmonized and Integrated Modules
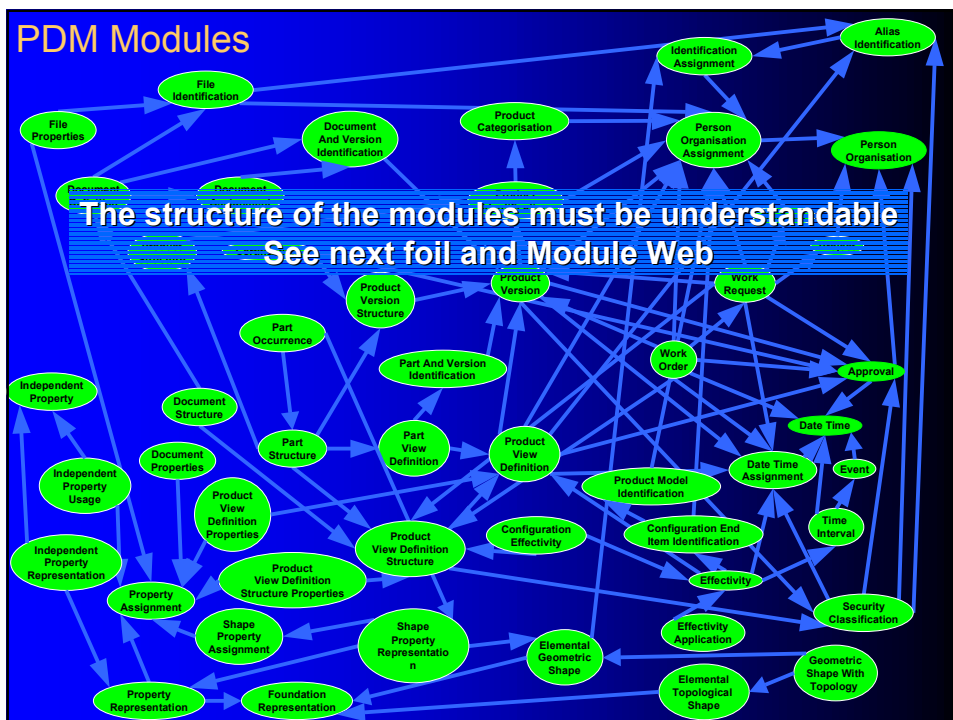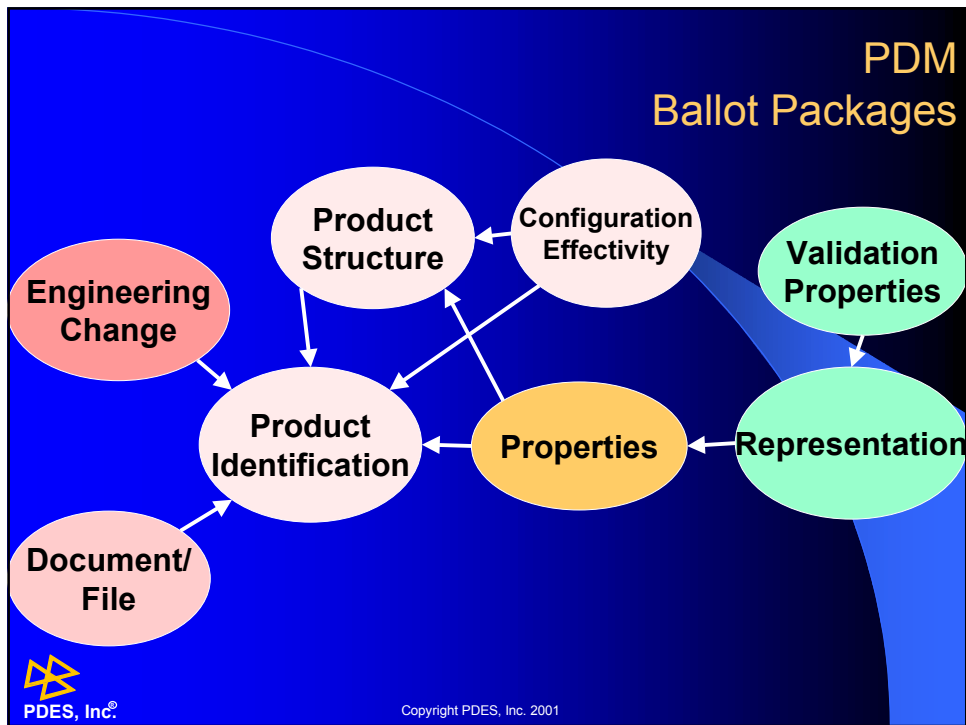
PDM Modules

- Suite of modules for core PDM capabilities
- Based on the PDM Schema
  - Harmonized among AP 203, 214 and 232
  - Being implemented by major PDM vendors and tested under the PDM Implementor Forum (http://www.pdm-if.org)
  - Being used by several companies to enable data exchange between heterogeneous PDM Systems
- Will be used by AP 203 2nd Edition
  - AP 233 and PLCS

PDM Modules

The structure of the modules must be understandable
See next foil and Module Web

PDM
Ballot Packages

Product Structure

Configuration Effectivity

Validation Properties

Engineering Change

Product Identification

Properties

Representation

Document/ File

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PDM Modules Ballot

- Delivered to WG12 convenor on 9 June 2001
  - Modules being balloted are available from
    http://wg10step.aticorp.org/ModuleBallot/
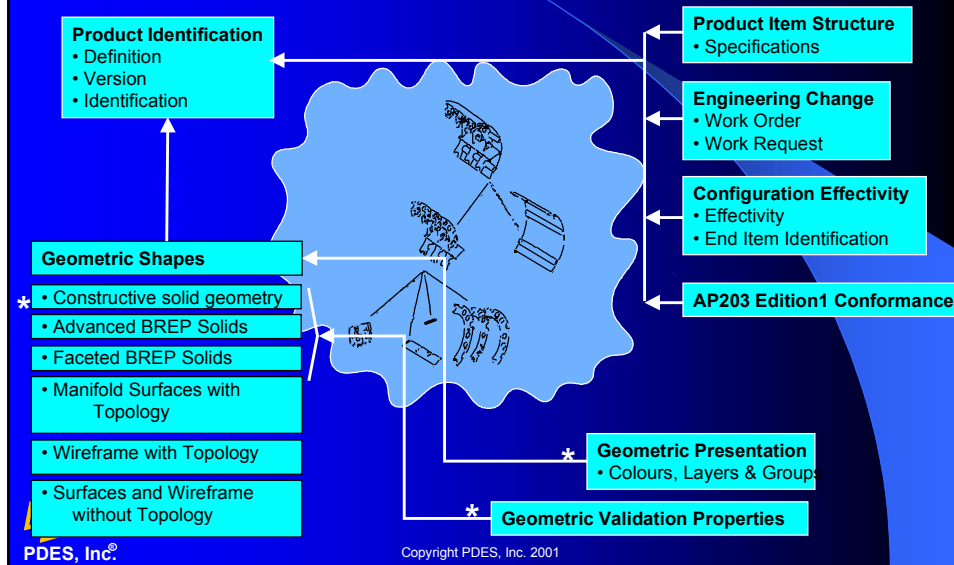 - A Windows program is also available from the above URL to aid the recording of Issues

Module Web

- Module Web contains
  - PDM modules
  - EACM modules
  - GDT modules
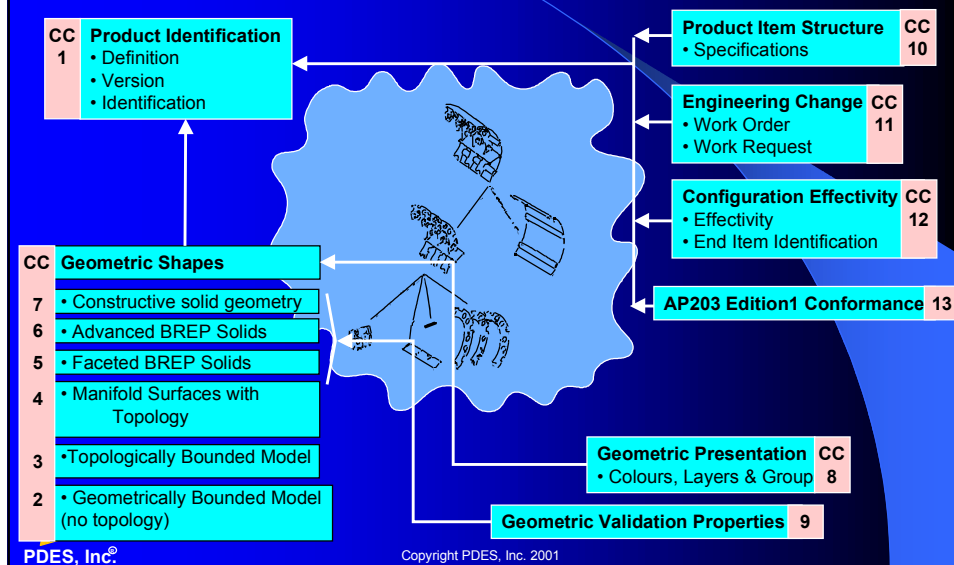 - AP203E2 initial draft
  - High level modules to support AP203E2
  - http://wg10step.aticorp.org/

AP203 Edition 2
Configuration Controlled Design

Configuration Controlled 3D Design of Mechanical Parts and Assemblies

Product Identification
- Definition
- Version
- Identification

Geometric Shapes
- Constructive solid geometry
- Advanced BREP Solids
- Faceted BREP Solids
- Manifold Surfaces with Topology
- Wireframe with Topology
- Surfaces and Wireframe without Topology

Product Item Structure
- Specifications

Engineering Change
- Work Order
- Work Request

Configuration Effectivity
- Effectivity
- End Item Identification

AP203 Edition1 Conformance

Geometric Presentation
- Colours, Layers & Groups

Geometric Validation Properties

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Configuration Controlled 3D Design of Mechanical Parts and Assemblies

CC 1 **Product Identification**
- Definition
- Version
- Identification

CC Geometric Shapes
- **7** Constructive solid geometry
- **6** Advanced BREP Solids
- **5** Faceted BREP Solids
- **4** Manifold Surfaces with Topology
- **3** Topologically Bounded Model
- **2** Geometrically Bounded Model (no topology)

Product Item Structure **CC 10**
- Specifications

Engineering Change **CC 11**
- Work Order
- Work Request

Configuration Effectivity **CC 12**
- Effectivity
- End Item Identification

AP203 Edition1 Conformance **13**

Geometric Presentation **CC 8**
- Colours, Layers & Group

Geometric Validation Properties **9**

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203 Edition 2

- Will be upwards compatible with edition 1 through a migration conformance class
- Each conformance class is a module
- *Close to sending 203 E2 to convenor*

Questions?